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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/300,137      | 04/27/1999  | KENNETH B. LAZARUS   | ACX-103CN2CP        | 4135             |

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|          |              |
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| ART UNIT | PAPER NUMBER |
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2834

DATE MAILED: 07/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

300 137

Applicant(s)

Lazaros et al

Examiner

M. Budd

Group Art Unit

2834

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

☒ Responsive to communication(s) filed on 5-14-02

☒ This action is **FINAL**.

- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 35-54 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 35-54 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 2834

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 35-40, 42-44, 47-49 and 51 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Hathaway, Chida or Itsumi.

Note Itsumi (Figs. 3 & 4), first electro-active element #35a, second electro-active element #35b, first conductor #37a, second conductor #37c. Chida (Fig. 10), and Hathaway (figs. 22-25) read on the claims in a similar manner.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hathaway, Chida or Itsumi.

Hathaway, Chida and Itsumi teach the sigmoidal bender is well known per se but don't provide encapsulation. However, encapsulating a piezoelectric device to protect it from a hostile environment and electrically insulate it is well known per se (official notice taken), and thus to encapsulate Hathaway, Chida or Itsumi for at least these reasons would have been obvious to one of ordinary skill in the art.

Art Unit: 2834

Claims 45, 46, 50 and 52-54 rejected under 35 U.S.C. 103(a) as being unpatentable over Hathaway, Chida or Itsumi in view of Lazarus.

Hathaway, Chida and Itsumi teach the basic actuator but not shear coupled to an object or coupled to an insulator. However, Lazarus teaches using a piezoelement strain coupled via an insulator to damp a structure. To use the specific sigmoidal bending mode transducer of Hathaway, Chida or Itsumi in place of the conventional bending mode transducer of Lazarus would be the mere substitution of known actuators and would have been obvious to one of ordinary skill in the art. Likewise, to put Hathaway, Chida or Itsumi to work in the known system of Lazarus would have been within the skilled expected of the routineer and therefore obvious to one of ordinary skill in the art. The known, expected differences in the operation of specific actuators would be the guide used by the designer when selecting which would be best in a particular, specific situation.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

Application/Control Number: 09/300,137


Page 4

Art Unit: 2834

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Budd/ds

07/08/02

  
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SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800